UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,779	11/24/2003	Kase J. Saylor	090936.0525	4953

31625   7590   08/23/2007

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PAUL, DISLER

ART UNIT	PAPER NUMBER
2615	

MAIL DATE	DELIVERY MODE
08/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/720,779	SAYLOR ET AL.
	Examiner	Art Unit	
	Disler Paul	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *11/24/03*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   Claims 11-12, 26-27 recited the limitation "the dynamic simulated entity" in the claim 1.

There is insufficient antecedent basis for this limitation in the claim.

Re claims 11-12, for prior art, references, the examiner will read the claims such as: both

claims are also depended upon claims 10 in addition to claims 1.

Similarly Re claims 26-27, for prior art, references, the examiner will read the claims

such as: both claims are also depended upon claims 25 in addition to claims 16.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1,3-5; 7-10; 16,18-20,22-25 are rejected under 35 U.S.C. 102(e) as being

anticipated by Chrysanthakopoulos et al. (US 2004/0064320 A1).

Re claim 1, Chrysanthakopoulos et al. disclose the method for

providing simulated audio communications to a simulation system (page

1 [0001]), comprising the steps of: linking as a data network, a

server and two or more client systems (fig.3-4; page 4[0040,0043]);

sampling audio input at a first client system and resulting in sampled

audio data (fig.4(141);page 5[0046 line 9-13), transmitting the

sampled audio data to the server and using the server to process the

sampled audio input for creating audio effects with applying one

transceiver model and at least one impairment model, wherein the

transceiver model injects transceiver effects into the sampled audio

input and the impairment model injects transmission effects into the

sampled audio input and resulting in processed audio data (fig.4

(224); page 5[0047-8]) wt filtering and 3D sound localizations and

shifting to count of a few effects); transmitting the processed audio

data to a second client system and converting the processed audio data

to an analog audio signal at the second client system (fig.4

(316,318);page 4[0045 line 6-11; page 5[0052 line 1-10] & page 2[0008]

line 30-32).

Re claim 3, the method of claim 1, wherein the simulation system

provides a visual simulation, and further comprising the step of

providing a visual display corresponding to control of one or more

audio qualities of the audio communications (fig.2-3; page

3[0023,0026], video games;).

Re claim 4 has been analyzed and rejected with respect to claim 3 above.

Re claim 5, the method of claim 1, wherein the transceiver model represents at least a type of receiver, transmitter, or transceiver (fig.3 (100-n)/transmitter and receiver of audio data; page 4[0038]).

Re claim 7, the method of claim 1, wherein the impairment model represents one or more attributes from the following group: channel fading, multi-path fading, propagation delay, noise (including Gaussian), Doppler shift effects, and gain control (page 5[0047-8] with (distortion effect, amplitude modulation and audio localization)).

Re claim 8, the method of claim 1, wherein the transceiver model represents a wireless receiver (Page 2[0024]) and the impairment model represents one or more attributes from the following group: filtering, noise injection, line-of-sight effects, propagation losses, and signal fading (page 5[0047-8], effect such as filtering and shifting).

Re claim 9, the method of claim 1, wherein either the first client system or the second client system or both are transceiver systems (fig.3).

Re claim 10, the method of claim 1, wherein the impairment model uses

dynamic simulated entity data (page 5[0047], dynamic simulation with

amplitude, distortion).

Re claims 16,18-20,22-25 have been analyzed and rejected with respect

to claims 1,3-5,7-10 respectively.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

5.   Claims 11,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chrysanthakopoulos et al. (US 2004/0064320 A1) and further in view Hill et al. (5,636,283).

Re claim 11, the method of claim 10, However, Chrysanthakopoulos

et al. fail to disclose of the further limitation wherein the dynamic

simulated entity data is velocity data of the first client system or

the second client system or both. But, hill et al. discloses of a

system wherein having the dynamic simulated entity data being velocity

data of the system (col.9 line 38-52) for the purpose of creating the

effect of a sound source moving in space. Thus, taking the combined

teaching of Chrysanthakopoulos et al. and now hill et al as a whole,

it would have been obvious at the time of the invention to have

incorporated the having the dynamic simulated entity data being

velocity data of the system as in Chrysanthakopoulos et al. for the

purpose of creating the effect of a sound source moving in space.

    Re claim 26 has been analyzed and rejected with respect to claim

11 above.

6.   Claims 15,30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chrysanthakopoulos et al. (US 2004/0064320 A1) and further in view of Choi et al. (US

6,871,176 B2).

Re claim 15, the method of claim 1 with the impairment model, However,

Chrysanthakopoulos et al. fail to disclose of the further limitation

wherein the impairment model is a channel noise model, based on

Gaussian noise generator output data whose level is controlled by path

gain. However, Choi et al. did disclose of a system wherein the

similar concept of having a Gaussian noise generator output whose

level is control by a path gain (fig.4 (404,406); col.13 line 55-65)

for the purpose of being enable to synthesized the speech signal in

producing good sound quality, thus taking the combined teaching of

Chrysanthakopoulos et al. and Choi et al. as a whole, it would have

been obvious for one of the ordinary skill in the art at the time of

the invention to incorporate the having a Gaussian noise generator

output whose level is control by a path gain for the purpose of being

enable to synthesized the speech signal in producing good sound

quality.

Re claim 30 has been analyzed and rejected with respect to claim 15 as above.

7.   Claims 12,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chrysanthakopoulos et al. (US 2004/0064320 A1) and further in view of Kim (2003/0120492

A1).

        Re claim 12, the method of claim 10, but, Chrysanthakopoulos et al. fail to disclose of

the dynamic simulated entity data is the distance between the first client system and the

second client system. But, Kim disclosed of a sound effect system wherein simulated data is

the distance between the first client system and the second client system (fig.1; page 3[0037])

for the purpose of enabling the communication in the virtual environment to be effected by

speech with reality.

        Re claim 27, has been analyzed and rejected with respect to claim 12 above.

8.   Claims 13,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chrysanthakopoulos et al. (US 2004/0064320 A1) and further in view of Maher (6,078,669).

Re claim 13, the method of claim 1 with the impairment model sound

effect, However, Chrysanthakopoulos et al. fail to disclose of the

impairment model is a multipath model, based on velocity of the second

client system and radio frequency. But, Maher disclose of a system

wherein the similar concept of sound effect of path model wherein the

parameters is based on velocity and frequency (col. 2 line 55-65;

col.4 line 40-55;col.8 line 1-12) for the purpose of creating audio

spatial localization for arbitrary sound source moving with a

trajectory and velocity as respect to the listener in good manner.

Thus, taking the combined teaching of Chrysanthakopoulos et al. and

Maher as a whole, it would have been obvious for one of the ordinary

skill in the art to have incorporated the similar concept of sound

effect of path model wherein the parameters is based on velocity and

frequency for the purpose of creating audio spatial localization for

arbitrary sound source moving with a trajectory and velocity as

respect to the listener in good manner.

Re claim 28 has been analyzed and rejected with respect to claim 13

above.

9.   Claims 2,6,14,17,29,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chrysanthakopoulos et al. (US 2004/0064320 A1) and further in view of Official notice.

Re claim 2, the method of claim 1, wherein the simulation system

provides tactile simulation (fig.1 (104,132a,b,134); page 3[0024]),

and communication among many users and futher of authenticating a

player for entering in a game and interconnecting a player from one to

the other (page 4[0041]; fig.3 (306)). However, Chrysanthakopoulos et

al. fail to disclose of the limitation wherein further comprising the

steps of using tactile simulation to select a transceiver. However,

official notice is taken, the concept of selecting the user with using

a tactile simulation is commonly known, in the art, thus it would have

been obvious at the time of the invention to having incorporating the

concept of using tactile simulation to select a transceiver for the

purpose of being given the options to choosing the type of player to

play with during the games.

Chrysanthakopoulos et al. further disclose of the transmitting

data representing the selected transceiver to the server such that the

selected transceiver corresponds to the transceiver model (fig.2 4

(224), each console is incorporated with such server).

Re claim 14, the method of claim 1 with the impairment model,

However, Chrysanthakopoulos et al. fail to disclose of the further

limitation wherein the impairment model is a Doppler effects model,

based on velocity of the second client system and the angle between

the first client system and the second client system. However,

official notice is taken that the idea of determining the Doppler

effect which is based on velocity and angle positions is commonly

known in the art, thus it would have been obvious for one of the

ordinary skill in the art to have incorporated the similar concept of

determining the Doppler effect which is based on velocity and angle

positions for creating the sound effect based on positional movement

of the sound source.

Re claims 17,29 have been analyzed and rejected with respect to claim

2 and 14 respectively.

Re claim 6, the method of claim 1, But, Chrysanthakopoulos et al.

fail to disclose of the transceiver model represents at least the

transceiver power. However, official notice is taken that the

limitation of having the transceiver model representing the

transceiver power is commonly known in the art, thus it would have

been obvious for one of the ordinary skill in the art at the time of

the invention to have incorporated the additional feature of having

the transceiver model representing the transceiver power for purpose

of creating sound effect based on power model of transceiver.

Re claim 21 has been analyzed and rejected with respect to claim 21

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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